CLAIM AMENDMENTS

- 1-9. (canceled)
- 10. (previously presented): A tubulin inhibitor of the formula (V)

or a pharmaceutically acceptable salt, enantiomer, or diastereomer form thereof; wherein X^1 and X^2 are N and X^3 and X^4 are C independently substituted with Y; R^1 is H, C_{1-6} alkyl, C_{1-6} alkylNR 5 R 6 , C_{1-6} alkylNR 5 COR 6 , C_{1-6} alkylCO $_2$ R 5 , or C_{1-6} alkylCONR 5 R 6 ,

wherein R^5 and R^6 are each independently H, C_{1-4} alkyl, aryl, hetaryl, C_{1-4} alkylaryl, or C_{1-4} alkylhetaryl or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR^7 :

wherein R^7 is H or C_{1-4} alkyl;

 R^2 is selected from OH, C_{1-6} alkylOH, OC_{2-6} alkylOH, C_{1-6} alkylNR 8 R 9 , OC_{2-6} alkylNR 8 COR 9

wherein R^8 and R^9 are each independently H, C_{1-4} alkyl, C_{1-4} alkylNR¹¹R¹³, hetaryl, or cyclohetalkyl, or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR¹⁴;

wherein R^{12} is C_{2-4} alkyl, C_{1-4} alkylN $R^{11}R^{13}$, hetaryl, or cyclohetalkyl;

wherein R^{11} and R^{13} are each independently H, or C_{1-4} alkyl, or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR^{14} ;

wherein R^{14} is H or C_{1-4} alkyl;

wherein R^{10} is H or $C_{1\text{-}4}$ alkyl;

 R^3 and R^4 are each independently H, halogen, C_{1-4} alkyl, OH, OC_{1-4} alkyl, CF_3 , or OCF_3 ;

Q is C_{1-4} alkyl;

W is selected from C_{1-4} alkyl, and C_{2-6} alkenyl; where C_{1-4} alkyl or C_{2-6} alkenyl may be optionally substituted with C_{1-4} alkyl, OH, OC_{1-4} alkyl, or $NR^{15}R^{16}$;

wherein R^{15} , and R^{16} are each independently H, C_{1-4} alkyl, C_{1-4} alkyl cycloalkyl, C_{1-4} alkyl cycloalkyl, aryl, or hetaryl, or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR^{17} ;

wherein R^{17} is H, or C_{1-4} alkyl;

A is aryl or hetaryl optionally substituted with 0-3 substituents independently selected from halogen, C_{1-4} alkyl, CF_3 , aryl, hetaryl, OCF_3 , OC_{1-4} alkyl, OC_{2-5} alkylNR¹⁸R¹⁹, Oaryl, Ohetaryl, CO_2R^{18} , $CONR^{18}R^{19}$, $NR^{18}R^{19}$, C_{1-4} alkylNR¹⁸R¹⁹, $NR^{20}C_{1-4}$ alkylNR¹⁸R¹⁹, $NR^{18}COR^{19}$, $NR^{20}CONR^{18}R^{19}$, and $NR^{18}SO_2R^{19}$;

wherein R^{18} and R^{19} are each independently H, C_{1-4} alkyl, C_{1-4} alkyl cyclohetalkyl, aryl, hetaryl, C_{1-4} alkyl aryl, or C_{1-4} alkyl hetaryl, or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR^{21} ;

wherein R^{21} is H or C_{1-4} alkyl;

wherein R^{20} is H or C_{1-4} alkyl;

Y is selected from H, C₁₋₄ alkyl, OH, and NR²²R²³;

wherein R^{22} and R^{23} are each independently H or $C_{1\text{--}4}$ alkyl.

11. (previously presented): A compound selected from the group consisting of:

or a pharmaceutically acceptable salt or enantiomer form thereof.

12. (previously presented): A compound of the formula:

or a pharmaceutically acceptable salt or enantiomer form thereof.

- 13. (canceled)
- 14. (previously presented): A composition comprising a carrier and at least one tubulin inhibitor according to claim 10.
- 15. (withdrawn): A method to treat a hyperproliferation-related disorder or disease state in a subject, said method comprising administering a therapeutically effective amount of at least one compound according to claim 10.
- 16. (withdrawn): The method of claim 15, wherein the hyperproliferation-related disorder or disease state is treatable by the modulation of microtubule polymerisation.
- 17. (withdrawn): The method of claim 15, wherein the hyperproliferation-related disorder or disease state is selected from the group consisting of cancer, infectious diseases, vascular restenosis or inflammatory diseases.

18. (withdrawn): A method to treat a protein-kinase related disorder or disease state in a subject, said method comprising administering a therapeutically effective amount of at least one compound according to claim 10.

- 19. (withdrawn): The method of claim 18, wherein the protein-kinase related disorder or disease state is selected from the group consisting of atopy, cell mediated hypersensitivity, rheumatic diseases, other autoimmune diseases and viral diseases.
- 20. (withdrawn): A method to treat diseases and conditions associated with inflammation and infection in a subject, said method comprising administering a therapeutically effective amount of at least one compound according to claim 10.
- 21. (previously presented): A composition comprising a carrier and at least one compound according to claim 11.
- 22. (previously presented): A composition comprising a carrier and at least one compound according to claim 12.
- 23. (previously presented): The tubulin inhibitor of claim 10, wherein R^2 is selected from C_{1-6} alkylOH, OC_{2-6} alkylOH, C_{1-6} alkylNR⁸R⁹, OC_{2-6} alkylNR⁸R⁹, C_{1-6} alkylNR⁸COR⁹, OC_{2-6} alkylNR⁸COR⁹, OC_{2-6} alkylNR⁸COR⁹, OC_{2-6} alkylNR⁸COR⁹, OC_{2-6} alkylNR⁸COR⁹, OC_{2-6} alkylhetaryl, OC_{2-6} alky
 - 24. (currently amended): A compound of the formula (V)

or a pharmaceutically acceptable salt, enantiomer, or diastereomer form thereof;

wherein X^1 and X^2 are N and X^3 and X^4 are C independently substituted with Y; wherein:

 R^1 is H, C_{1-6} alkyl, C_{1-6} alkylNR⁵R⁶, where R⁵ and R⁶ are each independently H, C_{1-4} alkyl, aryl, or hetaryl, or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR⁷;

wherein R^7 is H or C_{1-4} alkyl;

 R^2 is selected from C_{1-6} alkylOH, OC_{2-6} alkylOH, C_{1-6} alkylNR $^8R^9$, OC_{2-6} alkylNR $^8COR^9$, OC_{2-6} alkylNR 8

wherein R^8 and R^9 are each independently H, C_{1-4} alkyl, C_{1-4} alkylNR¹¹R¹³, hetaryl, or cyclohetalkyl, or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR¹⁴;

wherein R^{12} is $C_{2\cdot 4}$ alkyl, $C_{1\cdot 4}$ alkylNR¹¹R¹³, hetaryl, or cyclohetalkyl;

wherein R^{11} and R^{13} are each independently H, or C_{1-4} alkyl, or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR^{14} ;

wherein R^{14} is H or C_{1-4} alkyl;

wherein R^{10} is H or C_{1-4} alkyl;

 R^3 and R^4 are each independently H, halogen, C_{1-4} alkyl, OH, OC_{1-4} alkyl, CF_3 , or OCF_3 ; Q is CH;

W is C_{1-4} alkyl C_{2-4} alkyl, or C_{2-6} alkenyl; where C_{1-4} alkyl C_{2-4} alkyl or C_{2-6} alkenyl may be optionally substituted with C_{1-4} alkyl, OH, OC_{1-4} alkyl or $NR^{15}R^{16}$;

 R^{15} , and R^{16} are each independently H or C_{1-4} alkyl, or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR^{17} ;

A is aryl, or hetaryl optionally substituted with 0-2 substituents independently selected from halogen, C_{1-4} alkyl, CF_3 , aryl, hetaryl, OCF_3 , OC_{1-4} alkyl, OC_{2-5} alkyl $NR^{18}R^{19}$, Oaryl, Ohetaryl, CO_2R^{18} , $CONR^{18}R^{19}$, $NR^{18}R^{19}$, C_{1-4} alkyl $NR^{18}R^{19}$, $NR^{20}C_{1-4}$ alkyl $NR^{18}R^{19}$, $NR^{18}COR^{19}$, $NR^{20}CONR^{18}R^{19}$, and $NR^{18}SO_2R^{19}$;

wherein R^{18} and R^{19} are each independently H, C_{1-4} alkyl, C_{1-4} alkyl cyclohetalkyl, aryl, hetaryl, C_{1-4} alkyl aryl, or C_{1-4} alkyl hetaryl, or may be joined to form a 3-8 membered ring optionally containing one of O, S or NR^{21} ;

wherein R^{21} is H or C_{1-4} alkyl; wherein R^{20} is H or C_{1-4} alkyl; Y is selected from H, C_{1-4} alkyl and $NR^{22}R^{23}$;

wherein $R^{22} R^{23}$ are each independently H or $C_{1\text{-}4}$ alkyl.

25. (previously presented): The compound of claim 24 selected from:

and

or a pharmaceutically acceptable salt or enantiomer form thereof.

- 26. (previously presented): A composition comprising a carrier and at least one tubulin inhibitor according to claim 23.
- 27. (previously presented): A composition comprising a carrier and at least one compound according to claim 24.
- 28. (previously presented): A composition comprising a carrier and at least one compound according to claim 25.

29. (previously presented): A compound of the formula:

30. (previously presented): A composition comprising a carrier and at least one compound according to claim 29.